

A Message from the Manager

I'm proud of the Hanford Site's accomplishments over the last year, and I'm delighted to be able to present them to you in the form of Hanford's second annual report.

Take the time to read about our challenges and our successes, and I think you'll agree that despite the complex and dangerous nature of our work, we are making progress toward resolving the site's key safety and environmental concerns while capitalizing on science and technology development at the Pacific Northwest National Laboratory.

Not every project has moved as quickly or as smoothly as we would like. Indeed, in a couple of areas we encountered safety issues that forced us to slow things down to make sure we were providing adequate protection for our workers. Delays in our schedule to pump the remaining waste out of Hanford's single-shell tanks were a source of friction with the State of Washington, for example, and we also encountered problems in getting plutonium materials stabilized at the Plutonium Finishing Plant. Clearly, we have had our share of stumbling blocks.

But we're working through those issues and others, and we are getting things resolved. Last October, Energy Secretary Richardson stood with Washington's Governor and Attorney General to announce an agreement with the State that will allow us to get on with the work of stabilizing the single-shell tanks according to a realistic schedule—while preserving our commitment to keep employees safe.

That agreement is but one of our important 1998 milestones. We made some terrific strides across the Hanford Site, including:

- Signing a multi-billion-dollar contract that provides the path for safe treatment of Hanford's radioactive tank waste. The contract with BNFL Inc., worth up to \$10.4 billion, is the biggest, most important "privatization" venture ever undertaken by the U.S. Department of Energy and means that resolution of one of Hanford's chief environmental threats now is underway. DOE is making good on its commitment to protect the Columbia River.

- Completing final deactivation of the WWII-era B Plant four years ahead of schedule and \$100 million under budget. This incredible feat dramatically reduced the plant's risk to workers and the environment, and will allow us to avoid tens of millions of dollars each year in maintenance costs.

- Successfully "cocooning" Hanford's C Reactor—the first reactor in the DOE complex to be placed in Interim Safe Storage. The reactor is now completely encased to protect workers and the environment while its radioactivity safely decays away for up to 75 years.

- Hammering out a new schedule for removal of the spent fuel from the K Basins. That schedule, announced jointly with the Environmental Protection Agency, will have the first fuel removed from the basins in 2000 and all fuel movement completed in 2003. The Canister Storage Building, which will house the fuel once it's removed from the basins, is nearing completion.

- Shrinking the Hanford Site—literally. The 311 hectares (768 acres) known as the "1100 Area" were transferred to the Port of Benton for use in economic development benefiting the Tri-Cities.

- Starting operations at the first facility in the DOE complex designed to prepare transuranic waste for offsite burial. The Waste Receiving and Processing facility—or WRAP—could eventually process up to 70,000 drums of solid waste that will be shipped to the Waste Isolation Pilot Plant in Carlsbad, New Mexico.

- Making DOE's William R. Wiley Environmental Molecular Sciences Laboratory available to more than 700 researchers around the globe. Research funding for the world-class user facility has exceeded goals by more than \$2 million.

- Completing verification of the Pacific Northwest National Laboratory's Integrated Environment, Safety and Health Management System—the first such verification for a major laboratory in the DOE complex.

- Opening the new HAMMER facility to nationwide acclaim as the premier hands-on training program.



This annual report provides you the opportunity to read about these milestones and many others. It's meant to be frank, user-friendly material—I hope we've succeeded. As always, I appreciate your interest in the work we're getting done at Hanford, and I invite you to keep up on our progress via the Hanford Site website, at:

<http://www.hanford.gov>.

A handwritten signature in cursive script that reads "John D. Wagoner".

John D. Wagoner, Manager
DOE-Richland Operations Office

Hanford Manager John Wagoner retired from the Department of Energy in January 1999 after 37 years in government service.

Fiscal Year 1998 Highlights. . .

A Year of Progress, A Year of Results



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Lightweight and Drives Great. Pacific Northwest National Laboratory continued collaborations with the auto industry to develop lightweight, fuel-efficient cars of the future.



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Beaming With Pride. The molecular beam epitaxy and chemical vapor deposition systems are state-of-the-art research tools housed in the Environmental Molecular Sciences Laboratory, which enjoyed a successful first year of operation.



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A Million Reasons to Celebrate. In July 1998, a truck delivered the one-millionth ton of contaminated soil and waste for disposal in the two-year-old Environmental Restoration Disposal Facility on Hanford's central plateau. The waste material came from cleanup sites along the Columbia River.



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100 Million Reasons to Celebrate. Thanks to hard work and innovative technology, B Plant was deactivated on September 29, 1998, four years ahead of schedule, saving \$100 million over prior estimates.



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Not Much Left to C. C Reactor was the first DOE reactor to be placed in Interim Safe Storage. The reactor block was successfully encased in an enclosure that will protect people and the environment for the next 75 years and reduce maintenance costs by \$185,000 annually.



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The White Glove Treatment. The Waste Receiving and Processing Facility received glovebox operation startup authority on September 16, 1998, and began processing low-level and transuranic waste the next day.



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Airing on the Side of Safety. Tank farm operations at Hanford have become safer and more compliant following the completion of complex and extensive tank ventilation upgrades.



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Back on Course. Energy Secretary Bill Richardson, Washington Governor Gary Locke, and Senator Patty Murray announce an agreement that provides cleanup timetables and priorities for Hanford waste tanks—and averts a legal showdown.

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